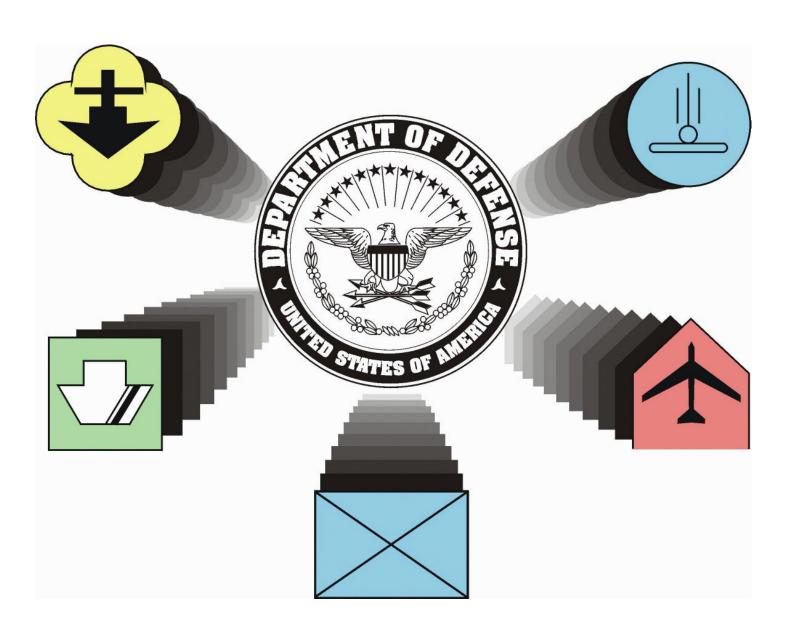
## Symbology Standards Management Committee

## Meeting Support Package May 6, 1999



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## **SSMC Meeting Agenda**

May 06, 1999 – 8:30 a.m.

Logicon Enterprise Engineering Solutions 1831 Wiehle Avenue Reston, Virginia

Welcome	- Opening Remarks from the Chair	Ms. Anneliese Martin (JIEO)
Old Business	<ul><li>Approve Previous Meeting Minutes</li><li>Review Current Action Items</li><li>Disposition of CP 98-04A</li><li>Discuss Status of CP 98-05</li></ul>	All JIEO JIEO All
New Business	<ul> <li>Discuss/Vote on CP 99-01A</li> <li>Discuss/Vote on CP 99-02</li> <li>Discussion of Change Management (CM)/Change Proposal Process</li> <li>Potential CP for 4-Digit Year</li> </ul>	All All JIEO
Wrap Up	<ul><li>Assign New Action Items</li><li>Set Date for Next SSMC Meeting</li><li>Entertain Discussion Topics for Next SSMC Meeting</li></ul>	JIEO JIEO JIEO

## Adjourn



#### DEFENSE INFORMATION SYSTEMS AGENCY JOINT INTEROPERABILITY AND ENGINEERING ORGANIZATION 10701 PARKRIDGE BLVD. RESTON, VA 20191-4398



IN REPLY

**Center for Standards** 

March 2, 1999

Ms. Anne Keays

#### MEMORANDUM FOR DISTRIBUTION

**SUBJECT:** Record of Technical Discussions, Symbology Standards Management Committee (SSMC) meeting, 3 February 1999

#### 1. INTRODUCTION

The meeting was called to order at 0830 hours, 3 February 1999, by the Chair, Ms. Anneliese Martin, Information Standards Division, Center for Standards (CFS), Joint Interoperability and Engineering Organization (JIEO), Defense Information Systems Agency (DISA). The following voting member organizations were represented by the individuals listed:

Organization Representative

Assistant Secretary of Defense for Command,

Control, Communications, and Intelligence

Chairman, Joint Chiefs of Staff

Chief of Staff, U.S. Air Force Mr. Richard Jolly
Chief of Staff, U.S. Army LTC Mark Haines
Chief of Naval Operations Mr. Bob Chamberlain

Commandant of the Marine Corps

Commander in Chief, U.S. Atlantic Command Commander in Chief, U.S. European Command

Commander in Chief, U.S. Central Command

Commander in Chief, U.S. Pacific Command

Commander in Chief, U.S. Southern Command

Commander in Chief, U.S. Space Command

Commander in Chief, U.S. Special Operations Command

Commander in Chief, U.S. Strategic Command

Commander in Chief, U.S. Transportation Command

Department of Transportation, U.S. Coast Guard

Director, Defense Intelligence Agency

Director, National Imagery and Mapping Agency Mr. Dan Gleason

The roster of attendees is provided in Enclosure 1.

#### 2. APPROVAL OF PREVIOUS MEETING MINUTES

The Chair presented the 4/5 November 1998 meeting minutes and asked for recommended changes. No changes were offered, and the minutes were unanimously approved.

#### **OLD BUSINESS**

#### 3. ACTION ITEM REVIEW

AI 98-28

CTION ITEM	REVIEW
AI 97-29	Army will revise the definition and possibly rework the symbol for
	2.X.2.1.1.3.2.6, "limited access area." AI closed.
AI 98-18	JIEO will scour applicable STANAGs and update all the affiliation
	definitions accordingly. JIEO will then scrub the new definitions against
	Table I and related text sections. <i>Updated from MIL-STD-6016</i>
	definitions. AI closed.
AI 98-20	JIEO will revise and clarify the text descriptions of the new SIGINT-
	specific modifiers. AI open.
AI 98-21	JIEO will research the applicability and currency of C4IFTW. C4IFTW
	plays a significant role in GCCS – has not gone away. AI closed.
AI 98-22	JIEO will remove the arrowhead from the Offset Location Indicator in
	Figure 4 and incorporate it into the baseline. Completed. AI closed.
AI 98-23	JIEO will develop a change proposal to update offset location indicator.
	AI open.
AI 98-24	JIEO will develop a list of possible conflicts that MIL-STD-2525
	symbology has with MC&G symbology using the results of the MIL97-10
	action item. JIEO will then post these to the Symbology homepage in an
	appropriate place. AI open.
AI 98-25	ASPO will develop a CP for the following classes of symbols: Fire
	Planning, Air Corridor, Fire Planning Radius, and METOC basic types.
4 T 00 0 C	AI open.
AI 98-26	JIEO will delete Row "X" in table IX on page 33 and incorporate it into
A T OO 27	the baseline. Completed. AI closed.
AI 98-27	1) JIEO will add a '3' in columns 'N' and 'B/C' on row 'N.'
	2) JIEO will move text modifier field 'N' in figure 11 to lower right hand
	corner of all three symbols.  3) JIEO will move text modifier field 'N' in figure 12 NBC events to
	lower right-hand corner to match instructions in figure 11.
	4) JIEO will add text modifier field 'N' to generic instructions for symbol
	2.X.3.4.2 on page 404.
	5) JIEO will add text modifier field 'N' to symbol 2.X.3.4.7.1.
	6) JIEO will add text modifier field 'N' to symbol 2.X.3.4.7.2.
	All actions completed. AI closed.
A T 00 40	National Completed. In Constant Constan

Navy will research hierarchy in figure A-6 with regard to Land Attack

Missile, symbol 1.X.2.2.1.4. Develop change proposal if required. Delete

"Land" from "Surface/Land Launched Missle", and Navy develop CP for addition of "Cruise Missle" vice "Land Attack Missle". AI open.

- AI 98-29 To align symbology with earlier decisions to use one cross bar to represent light, two to represent medium and three to represent heavy equipment,
  - 1) JIEO will add a cross bar to the light air defense missile symbols 1.X.3.1.1.1.2.1 and 1.X.3.1.1.1.2.1.1;
  - 2) JIEO will add a cross bar to the medium air defense missile symbol 1.X.3.1.1.1.2.2; and
  - 3) JIEO will add a cross bar to the heavy air defense missile symbol 1.X.3.1.1.2.3, and will incorporate them into the baseline. *All actions completed. AI closed.*
- AI 98-30 JIEO will make symbol 1.X.3.1.1.7.2.1 represent a single, rather than multi-, rocket launcher and incorporate it into the baseline. *Completed*. *AI closed*.
- AI 98-31 JIEO will make symbol 1.X.3.1.1.7.2.2 represent a generic multi-rocket launcher and incorporate it into the baseline. *Completed. AI closed.*
- AI 98-32 ADD 'D' to symbol 1.X.3.1.1.8.8.1, Reconnaissance Marine Division, and incorporate it into the baseline. *Completed. AI closed.*
- AI 98-33 1) JIEO will add a horizontal line to symbol 1.X.3.2.1.1.2
  - 2) JIEO will add a horizontal line to symbol 1.X.3.2.1.1.2.1
  - 3) JIEO will add a horizontal line to symbol 1.X.3.2.1.1.2.2
  - 4) JIEO will add a horizontal line to symbol 1.X.3.2.1.1.2.3, and incorporate them into the baseline.

All actions completed. AI closed.

- AI 98-34 JIEO will change the hierarchy for 1.X.3.2.2.3.4 to reflect that 1.X.3.2.2.3.4.1 and 1.X.3.2.2.3.4.2 are mine clearing vehicles, not mine laying vehicles, and incorporate it into the baseline.
  - 1) Fix TABLE A-VI, page 64
  - 2) Fix figure A-28, page 86
  - 3) Fix TABLE A-XIII, page 212.

All actions completed. AI closed.

- AI 98-35 JIEO will correct duplicate symbols. Add 'CSAR' vice 'H' to SOF combat search and rescue symbol on page 250. Also display correct unknown representation for 'Fixed Wing utility, Heavy,' 1.X.6.1.1.3.3, page 249 and incorporate it into the baseline. *All actions completed. AI closed.*
- AI 98-36 JIEO will change 'X' ('Other') in TABLE B-III, to 'O' and incorporate into the baseline. *Completed. AI closed.*
- AI 98-37 1) The Army will identify all tactical graphics requiring multiple points to define the path of a symbol;
  - 2) JIEO will incorporate (Action Item 98-49) wording for identified symbols, "additional points (2.1, 2.2, ..., 2.n) may be added along graphics centerline to define bends in graphic ..."; and

- 3) JIEO will change anchor point three to indicate shaft dimension, and incorporate them into the baseline.
- AI open.
- AI 98-38 JIEO will modify paragraph 5.5.1.2 to:

  "... In general, line (including boundary lines) and area graphics...as depicted in table VIII. There are certain tactical graphics such as counter attack which are drawn in the 'present' status with dashed lines" and incorporate into the baseline. Completed. AI closed.
- AI 98-39 JIEO will change the orientation parameter on page 331 for tactical graphic 2.X.2.1.2.2. Orientation is to be determined by the order in which the points are entered. Incorporate this change into the baseline. *Completed. AI closed.*
- AI 98-40 JIEO will renumber the tips of the arrowhead anchor points on symbol 2.X.2.1.3.9 points 2 and 3 respectively vice 1 and 2 and incorporate it into the baseline. *Completed. AI closed.*
- AI 98-41 Army/ASPO to provide input to JIEO for drawing instructions for Air Corridor. *AI open*.
- **AI 98-42** JIEO will redraw generic symbol 2.X.2.5.2.1.2 with an 'A' vice the airborne symbol for the generic drawing and incorporate it into the baseline. *Completed. AI closed.*
- AI 98-43 JIEO will remove the enemy line depiction in the generic drawing instruction on page 361 for symbol 2.X.2.5.2.4 and incorporate it into the baseline. *Completed. AI closed.*
- AI 98-44 JIEO will reduce the size of symbol 2.X.2.3.1.3.3.1, reorient its anchor point to the center point and incorporate this change into the baseline. Completed for this and other symbols within the 2.X.3 set. AI closed.
- AI 98-45 NIMA will propose a change to align the MIL-STD-2525 wreck symbol with the MC&G symbols for wrecks, adding new symbols where necessary (page 448, symbol 2.X.6.3.1.3). *AI open.*
- AI 98-46 JIEO will cross check index prior to publishing. *Completed*. AI closed.
- AI 98-47 JIEO will procure a DoD Standardization Program project number. Number assigned: INST-0022. AI closed.
- AI 98-48 JIEO will correct name in table header on page 480 and incorporate into the baseline. *Completed. AI closed.*
- **AI 98-49** JIEO will incorporate (Action Item 98-49) the following resolution comments: 1, 2, 3, 4, 6, 24, 26, 29, 31, 32, 39, 46, 47, 48, 49, 50, 51, 52, 60, 80, 85, 87, 88, 94, 107, 112, 117, 120, 121, 123, 124, 125, 127, 128, 129, 130, 131, 132, 133, and 137. *All actions completed.* **AI closed.**

#### 4. CHANGE PROPOSALS

MIL98-04 ADD NEW SYMBOL, SYSTEM RANGE FANS. Change Proposal (CP) MIL98-04 was discussed, and issues regarding interoperability

raised. The Army (PM FATDS) will lead discussions, coordinate changes, perform modifications, and resubmit as CP98-04A.

MIL98-05 MULTIPLE UAV PLATFORM SYMBOLS. Tabled pending Air Force review of Symbol Identification Codes for the entire Air Track.

MIL98-06 CHANGE DESIGNATOR FOR SPECIAL OPERATIONS FORCES. *Approved*.

MIL98-07 COLOR BLUE WITH NEW CATEGORY NEUTRAL. Disapproved.

#### **NEW BUSINESS**

#### 5. NEW ACTION ITEMS

No new Action Items were introduced.

#### 6. NEW CHANGE PROPOSALS

MIL99-01 ADD UNKNOWN ENVIRONMENT. *CP MIL99-01 was discussed and recommendations made for changing "Assumed Hostile" to "Suspect" and utilizing the existing Affiliation Code letters in conjunction with or in place of "U". The Navy (CNO) will revise/return for comment.* 

#### 7. SYMBOLOGY IMPLEMENTATION AND CHANGE PROPOSAL PROCEDURES

Dr. Kathleen Fernandes, SPAWAR Systems Center, gave a presentation on the implementation of MIL-STD-2525 as a standard, and recommended some procedures for improving and streamlining the SSMC's Change Proposal process. Specific points covered were:

Questions concerning symbology implementation

- Options for implementing system-specific symbol sets what does "2525 compliance" mean?
- Content and planned use of GRAPHREP
- Symbology availability in the DII COE
- GSD is one, but not the only, reference implementation of 2525
- Access to multiple symbol sets requires support for both symbol display and UI to allow configurability
- Questions asked regarding operational utility of 2525 do we know it is as good as/better than current symbol sets?

Recommended ground rules for dealing with Change Proposals

- Focus on addressing *joint* symbology requirements (vice those of a single service/system)
- CPs identify new requirements; SSMC defines implementation consistent with hierarchy, design rules in MIL-STD

- CPs address what should be in the MIL-STD, do not perform symbology CM for future GSD/COE releases
- Need to decide if/when CPs can be used to reopen issues previously addressed/resolved by SSMC/MCEB
- Service/agency reps perform initial "scrub" of CPs, ensure that originator understands SSMC CM process

#### 8. HIERARCHY DISCUSSION

Mr. Thom Beal, Logicon, presented four options for a future overhaul of the current hierarchy structure. The reason for this requirement is the predicted need for Units, Installations, and Equipment for all dimensions (ground, air, sea surface, sea subsurface, etc.). After a brief review of the options, he recommended that before the next full version of MIL-STD-2525 is released (the "C" version) the SSMC adopt Option 3 and revise the standard accordingly. Mr. Beal noted that whatever option is accepted, it will be disruptive to the hierarchy. The Chair concurred with this view, and tabled the issue until a later date.

#### **WRAP UP**

#### 9. SSMC MEETING ADJOURNED

After agreeing to have an SSMC meeting on 6 May 1999 at Logicon, Reston, VA, the Chair adjourned the SSMC meeting at 1420 hours on 3 February 1999.

Anneliese Martin

Distribution Enclosures:

1. Roster of Attendees

Anneliese Martin Chair, Symbology Standards Management Committee

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#### DISTRIBUTION:

Director, Defense Intelligence Agency, ATTN: Mr. Pat Bond, Code PO5C, Washington, DC 20340

HQ AFSPC/SCXTA, ATTN: Capt McAllister, 150 Vandenberg Street, Suite 1105, Peterson AFB, CO 80914-4330

National Security Agency, ATTN: Maj Dennis Greene, DOD/K4I-TSPL, 9800 Savage Rd., Ft. Meade, MD 20755-6000

U.S. Army, PM Intelligence Fusion Office, ATTN: Mr. Ernie Zaloznik, 1616 Anderson Rd., McLean, VA 22102-1616

USSPACECOM, SMC/CWIX, ATTN: Lt Robert Russel, 155 Discover Blvd., Suite 1062, Los Angeles AFB, CA 90245-1062

U.S. Army, C2SID SPO, ATTN: Shamoli Patel, Battlefield Visualization, AMSEL-RD-C2-SP, Ft. Monmouth, NJ 07703

U.S. Army Systems Engineering Office, ATTN: Mr. James Gallagher, Army Systems Engineering Office, Ft. Monmouth, NJ 07703

USSOCOM/SOJ6-ID, ATTN: Mr. Bower, 7701 Tampa Point Blvd., MacDill AFB, FL 33621-5323

DISA (METOC) (D623), ATTN: Mr. Doug McDonald, 5600 Columbia Pike, Falls Church, VA 22041

HQ USMC (METOC), ATTN: LtCol Resavy, The Pentagon, Room 5C721, Washington, DC 20310

HQ USAF/XOWX (METOC), ATTN: MAJ Mitchell, 1490 AF, The Pentagon, Washington, DC 20330-1490

U.S. Naval Observatory, Bldg 1 (METOC), ATTN: CDR Furze, 3450 Massachusetts Ave., Washington, DC 20392-5421

Joint Staff J-38/ROD (METOC), ATTN: LtCol Key, The Pentagon, Room 2B885, Washington, DC 20318-3000

HQ Department of the Army, Office of the Deputy Chief of Staff for Intelligence (DAMI-POB) (METOC), ATTN: Mr. Page, Washington, DC 20310-1001

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#### E-MAIL DISTRIBUTION

rubel.john@hq.navy.mil	Chief of Naval Operations (N62), ATTN: CDR John Rubel, 2000 Navy Pentagon, Washington, DC 20350-2000
cole.simon@hq.navy.mil	Chief of Naval Operations (N62), ATTN: Mr. Simon Cole, 2000 Navy
	Pentagon, Washington, DC 20350-2000
keating@nctsi.spawar.navy.mil	Commander, Naval Command Control and Ocean Surveillance Center,
	RDT&E Division, Code D44209 (Roger Keating), 53245 Patterson Rd., San
wnugent@nctsi.spawar.navy.mil	Diego, CA 92152-7560  Commander, Naval Command Control and Ocean Surveillance Center,
whugent@hctsr.spawar.havy.him	RDT&E Division, Code D44209 (Bill Nugent), 53245 Patterson Rd., San
	Diego, CA 92152-7560
pfoley@msis.dmso.mil	Defense Modeling and Simulation Office, ATTN: Mr. Paul Foley, 1901 N.
	Beauregard St., Suite 504, Alexandria, VA 22311
paul.szabados@osd.mil	Director, OASD/C3I, CISA, Air Warfare Team, ATTN: Mr. Paul D.
	Szabados, Room 1C492, The Pentagon, Washington DC 20301-7400
martina@ncr.disa.mil	DISA/CFS, ATTN: Ms. Anneliese Martin, Parkridge III, Room 3304, 10701
	Parkridge Blvd., Reston, VA 22091-4398
chasem@ncr.disa.mil	DISA/JIEO/CFS, ATTN: Mike Chase, Parkridge III, Room 3205, 10701
	Parkridge Blvd., Reston, VA 20191-4357
oconnorm@ncr.disa.mil	DISA/JIEO/CFS, ATTN: Mike O'Connor, Parkridge III, D622, 10701
steve.dowd@langley.af.mil	Parkridge Blvd., Reston, VA 22091-4398  Aerospace Command and Control Agency (AC2A/C2FM), Steve Dowd,
steve.dowd@fangley.ar.ifin	Horizons Technology, Inc., 130 Andrews St., Suite 213, Langley AFB, VA
	23665
johnsonca@pentagon.af.mil	HQ USAF/SCTA, ATTN: Calvin Johnson, 1250 Air Force Pentagon,
	Washington, DC 20330-1250
kerrs@fhu.disa.mil	JITC/JTACD, ATTN: Mr. Steve Kerr, Building 57305, Ft. Huachuca, AZ
	85613
bentzd@jwfc.js.mil	Joint Warfighting Center, ATTN: CDR Dave Bentz, Doctrine Division,
	Fenwick Rd., Building 96, Ft. Monroe, VA 23651-5000
jmcconnell@logicon.com	Logicon Eagle Technology, ATTN: John McConnell, Linpro Park 1, 1831
111	Wiehle Ave., Suite 300, Reston, VA 20190-5220
kwoeller@logicon.com	Logicon Eagle Technology, ATTN: Kort Woeller, Linpro Park 1, 1831 Wiehle Ave., Suite 300, Reston, VA 20190-5220
swalsh@logicon.com	Logicon Eagle Technology, ATTN: Susan Walsh, Linpro Park 1, 1831
5 maisir & Togleon.com	Wiehle Ave., Suite 300, Reston, VA 20190-5220
dfowler@logicon.com	Logicon Eagle Technology, ATTN: Doug Fowler, 2100 S. Washington Blvd.,
	Arlington, VA 22204-5710
mhorten@nctsi.spawar.navy.mil	Navy Center for Tactical Systems Interoperability, ATTN: Ms. Mona Horten,
	53690 Tomahawk Dr., Suite A125, San Diego, CA 92147
gleasond@nima.mil	National Imagery and Mapping Agency, ATTN: SEIS, Stop D-86, Daniel
	Gleason, 4600 Sanganore Rd., Bethesda, MD 20816-5002
ferrarig@nima.mil	National Imagery and Mapping Agency, ATTN: SEIS, Stop D-86, Gordon
mions@nimo mil	Ferrari, 4600 Sanganore Rd., Bethesda, MD 20816-5002
rajans@nima.mil	National Imagery and Mapping Agency, ATTN: ST/S ES, Stop P-24, S. Danny Rajan, 12310 Sunrise Valley Dr., Reston, VA 20191-3449
jgreene@ace.navy.mil	Naval Air Warfare Center, Mail Stop 08, Code 4.3.1.1 (Ms. Janettarose
jgreene@acc.navy.mn	Greene), Warminster, PA 18974
	- C.

February 3, 1999, SSMC Minutes

twilkerson@sed.redstone.army.mil	Sigmatech Inc., ATTN: Todd Wilkerson, 6000 N. Technology Dr.,
	Huntsville, AL 35805-1955
fernande@spawar.navy.mil	SPAWAR Systems Center, Code 4221 (Dr. Kathleen Fernandes), 53560 Hull St., San Diego, CA 92152
gsd.mail@trw.com	TRW/FPI/5133, ATTN: Daryl Madden, 1 Federal Systems Park Dr., Fairfax,
<u> </u>	VA 22030
rex.mckinnon@scott.af.mil	U.S. Air Force, HQ AFC4A/TNBC, ATTN: Mr. Rex McKinnon, 203 W.
	Losey St., Room 2000, Scott AFB, IL 62225-5238
gregg.noud@scott.af.mil	U.S. Air Force, HQ AFC4A/TNBC, ATTN: Mr. Gregg Noud, 203 W. Losey
grogg.moud e scottar.mm	St., Room 2000, Scott AFB, IL 62225-5238
richard.jolly@scott.af.mil	U.S. Air Force, HQ AFC4A/TNBC, ATTN: Mr. Rick Jolly, 203 W. Losey
	St., Room 2000, Scott AFB, IL 62225-5238
anthony.pettiford@scott.af.mil	U.S. Air Force, HQ AFC4A/TNBC, ATTN: Mr. Anthony Pettiford, 203 W.
**	Losey St., Room 2000, Scott AFB, IL 62225-5238
turekd@leav-emh1.army.mil	U.S. Army, Command and General Staff College, Director, Corps &
	Division, ATTN: ATZL-SWW-P (Mr. Dave Turek), Ft. Leavenworth, KS
	66048
barnettd@leav-emh1.army.mil	U.S. Army, Command and General Staff College, Director, Corps &
	Division, ATTN: ATZL-SWW-P (Mr. Don Barnett), Ft. Leavenworth, KS
	66048
henningt@md.redstone.army.mil	U.S. Army, PEOMD/SFAE-AMD-TSD-E, ATTN: Mr. Ted Hennings, P.O.
	Box 1500, Huntsville, AL 35807-3801
zeman@doim6.monmouth.army.mil	U.S. Army Research Lab-HRED, CECOM, Field Element, ATTN: AMSRL-
	HR-ML (J. Zeman), Ft. Monmouth, NJ 07703-5630
chadwell@aspo.army.mil	U.S. Army Space Program Office, ATTN: Mr. Michael Chadwell, 2810 Old
	Lee Hwy., Suite 300, Fairfax, VA
morgant@aspo.army.mil	U.S. Army Space Program Office, ATTN: Mr. Tom Morgan, 2810 Old Lee
	Hwy., Suite 300, Fairfax, VA
mfish@comdt.uscg.mil	U.S. Coast Guard, HQ USCG, ATTN: Mr. Martin Fish, 2100 2 <sup>nd</sup> St. SW,
	Washington, DC 20593-0001
beyre@comdt.uscg.mil	U.S. Coast Guard, COMDT (G-SIA), ATTN: CDR Brad Eyre 2100 2 <sup>nd</sup> St.
	SW, Washington, DC 20593-0001
skopowskip@hqi.usmc.mil	U.S. Marine Corps, HQMC C4I, ATTN: Maj Paul Skopowlski, Code CP,
	Federal Office Bldg 2, Washington, D.C. 20380-1775
keaysa@quantico.usmc.mil	U.S. Marine Corps Combat Development Command, Doctrine (C427),
	ATTN: Ann Keays, 3300 Russell Rd., Quantico, VA 22134-5021
holroydd@nosc.mil	USACOM/J6, ATTN: LtCol Doug Holroyd, Code J612B, 1562 Mitsher Ave.,
	Suite 200, Norfolk, VA 23551-2488
<u>llmcneal@centcom.mil</u>	USCENTCOM/CCJ6, ATTN: Maj Larry McNeal, Building 540, MacDill
	AFB, FL 33608-7001
gorzoch@hq.eucom.mil	USEUCOM/ECJ6, ATTN: Ms. Diane Gorzoch, APO AE 09128-4209
rossifj0@hq.pacom.mil	USPACOM/J6I, ATTN: Major Frank Rossi, Systems Integration Division,
	Camp H.M. Smith, HI 96861
bennettr@pentagon-hqdadss.army.mil	USSOUTHCOM/SCJ6, ATTN: SCJ6-P (Mr. Ray Bennett), Unit 1160, APO
	AA 34003
clarkes@usspacecom.cas.af.mil	USSPACECOM, HQ USSPACECOM/J5X, ATTN: LtCol Steve Clarke, 250
	S. Peterson Blvd., Suite 116, Peterson AFB, CO 80914-3130
ramsey@j61.stratcom.af.mil	USSTRATCOM/ J6I, Plans and Architecture, ATTN: Mr. Ramsey
	Lawrence, 8456 South 42 <sup>nd</sup> St., Omaha, NE 68147

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koontzcl@transcom.safb.af.mil	USTRANSCOM/TCJ6, ATTN: Col Craig Koontz, Building 1961, 508 Scott
	Dr., Scott AFB, IL 62225-5357
haineml@hqda.army.mil	U.S. Department of the Army, 400 Army Pentagon ODCSOPS, ATTN:
	DAMO-SSP (LTC Mark Haines) Doctrine Branch, Strategy Plans Division,
	Washington, DC 20310-0400
ekasper@mail.arc.nasa.gov	Flight Symbology Working Group, Army/NASA Rotocraft Division, NASA
	Ames Research Center M/S 210-5, ATTN: Eugene Kasper Moffett Field, CA
	94035-1000
kdecker@ndc.navy.mil	Navy Warfare Development Command, ATTN: Ms. Kelly J. Decker, 1540
	Gilbert Street, N3P, Norfolk, VA 23511-2785
dsmith@pmsoldier.belvoir.army.mil	PM Soldier, ATTN: Mr. Donald R. Smith, Suite 121, 10401 Totten Rd., Ft.
	Belvoir, VA 22060
hasphow@c3smail.monmouth.army.mil	PM, FATDS, ATTN: Henry Saphow, SFAE-C3S-FS-TM/Bldg 457, Ft.
	Monmouth, NJ 07703-5404
jasterj@vtc.tacom.army.mil	U.S. Army TACOM, ATTN: Mr. Jeffery F. Jaster, 11 Mile Road, AMSTA-
	TR-R MS #264, Warren, MI 48397-5000
madigan@comanche.redstone.army.mil	Commanche Program Office, ATTN: Mr. Douglas H. Madigan, RSA-5681,
	SFAE-AVRAH-T, Redstone Arsenal, AL 35898

### **Attendee Roster**

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## Symbology Standards Management Committee Meeting February 3, 1999

Barnett, Donald	MAJ	CADD-CGSC
Beal, Thom	Mr.	Logicon/DISA/JIEO
Chamberlain, Robert	Mr.	NCTSI
Dowd, Steve	Mr.	AC2ISRC/C2FM
Doyle, John	Mr.	ASPO/GSD
Fernandes, Kathleen	Dr.	SSC SD
Gleason, Daniel	Mr.	NIMA
Haines, Mark	LTC	USDA/DAMO-SSP
Horten, Mona	Ms.	Logicon/NCTSI
Jolly, Richard	Mr.	AFCA/ITS
Keays, Ann	Ms.	MCCDC, Quantico
Large, Charles	Mr.	Logicon/DISA/JIEO
Martin, Anneliese	Ms.	DISA/JIEO
McConnell, John	Mr.	Logicon/DISA/JIEO
Morgan, Tom	Mr.	ASPO Support
Peyton, Buddy	Maj	MCCDC, Quantico
Ramos, John	Mr.	CSC-PM FATDS
Roth, Mike	Mr.	ASPO Support
Saphow, Henry	Mr.	PM FATDS
Smith, Donald	Mr.	PM, Soldier

14 Enclosure 1

## **Action Item Listing**

ACTION ITEM NUMBER	ACTION ITEM DESCRIPTION	STATUS	DATE ASSIGNED
AI 98 45	NIMA will propose a change to align the MIL-STD-2525 wreck symbol with the MC&G symbols for wrecks adding new symbols where necessary, (page 448, symbol 2.X.6.3.1.3)	open	11/05/98
AI 98 41	Army/ASPO will provide input to JIEO for drawing instructions for Air Corridor.	open	11/05/98
AI 98 37	1.Army will identify all tactical graphics requiring multiple points to define path of symbol.  2.JIEO will incorporate wording for identified symbols, "additional points (2.1, 2.2,, 2.n) may be added along graphics centerline to define bends in graphic.  3.JIEO will change anchor point three to indicate shaft dimension.	open	11/05/98
AI 98 28	Navy will research hierarchy in figure A-6 with regards to Land Attack Missile, 1.X.2.2.1.4. Develop change proposal if required.	open	11/05/98
AI 98 25	ASPO will develop a CP to classes of symbols fire planning, air corridor, fire Planning Radius, and METOC basic types.	open	11/05/98
AI 98 24	JIEO will develop a list of possible conflicts that MIL-STD-2525 symbology has with MC&G symbology using the results of the 97-10 action item. JIEO will then post these to the Symbology homepage in an appropriate place.	open	11/05/98
AI 98 23	JIEO will develop a change proposal to update offset location indicator.	open	11/05/98
AI 98 20	Army/ASPO will revise and clarify the text descriptions of the new SIGINT-specific modifiers.	open	06/04/98

SYMBOLOGY CONFIGURATION MANAGEMENT CHANGE PROPOSAL FORM				
CHANGE PROPOSAL NUMBER MIL98-04A				
ORIGINATOR	SPONSOR	DATE RECEIVED DATE OF ACTION		
PM FATDS	ARMY	3 FEB 1999	25 MAR 1999	
	CHANGE PROPOSAL TITLE			
ADD NEW SYMBOL, SYSTEM RANGE FANS				
SUGGESTED CHANGE				

The Fire Support community has an Urgent requirement to add a new symbol to MIL-STD-2525B.

- 1. The purpose of the Range Fan symbol is to graphically display Fire Support weapon and Target Acquisition systems effective ranges to commanders in the Common Operational Picture (COP)/Common Tactical Picture (CTP).
- 2. Recommend adding to hierarchy item 2.X.4, Fire Support, under the "Areas" hierarchy, 2.X.4.3, figure B-17, and table B-IV.

**Justification for Urgency:** Army Battle Command System (ABCS) is made up of six primary (MCS, AFATDS, CSSCS, AMDWS, ASAS and GCCS-A) and a number of extended systems. ABCS version 6.0/6.1 is a go-to-war software. The ABCS is required to be a level 6 DII COE compliant, which includes use of Graphical Situation Display (GSD). GSD with the MIL-STD-2525B capability will be available in DII COE version 4.0. It is anticipated that ABCS 6.0/6.1 will integrate DII COE 4.0. The major requirement for Fire Support is to provide ABCS targets and Range Fan graphical information, which support the commander's operational decisions. If MIL-STD-2525B is not implemented in DII COE 4.0 software release, then Fire Support will not be able to provide a critical decision making tool to commanders via the COP/CTP. ABCS 6.0 software development will be completed by Dec 99 in support of interoperability testing and the user's training requirements in order to meet First Digitized Division (FDD) fielding requirements.

**Overview:** Currently, the standard does not contain symbols depicting weapons and/or target acquisition systems Range Fans. The purpose of the Range Fan symbols is to graphically display to commanders and operators the operationally effective distances of fire support and target acquisition assets available. Incorporation into MIL-STD-2525B, which will be used in GSD, will allow the symbols to be transmitted/received by all battlefield systems. Range Fans have been designated a critical symbol required in the COP to be shared across the battlefield. The development of the COP/CTP is required of all ABCS participating in the First Digitized Division. AFATDS is the producer of Range Fans for the COP/CTP. AFATDS will retain this capability for fielding throughout the Army and USMC.

**Operational Description:** In general, a Range Fan is used to display the range (area coverage) of a weapon or target acquisition system. A minimum of four (4) data parameters (unit location, orientation, minimum and maximum range) is required to display a Range Fan. A minimum of six (6) data parameters (unit location, orientation, left and right limits (required to display a sector), minimum and maximum ranges) are required to display a sector Range Fan. Additional minimum and maximum ranges, and left and right limits may be entered as required. The minimum information required to interoperate with another system is defined below.

#### IMPLEMENTATION:

Description: Fire Support, Area, Weapon/Target Acquisition System Range Fans, Circular

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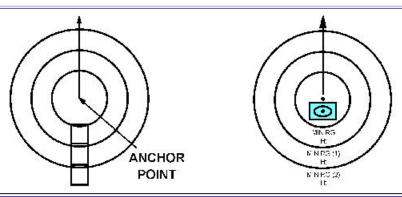
#### Parameters:

- Anchor Points. This graphic requires one anchor point that defines an object at a dynamic grid location. This coordinate, which pinpoints the current physical location of a specific unit, weapon or acquisition system, may change with the movement of the object. The symbol for that object is located at the anchor point.
- 2. Size/Shape. Shapes are concentric circles. Size is defined by the minimum and maximum ranges (as many as required) measured from the anchor point.
- 3. Orientation. The center point is typically centered over the known location of a weapon or target acquisition system. The orientation of the Circular Range Fan is the direction of engagement. The orientation may change as the object moves or changes.

Fixed/Dynamic: Dynamic, to support requirements that the fan box be transferable between true and relative locations.

Hierarchy: 2.X.4.3.11.1 Symbol ID: G\*FPAXC

Label: Text boxes will be used to label the minimum and maximum ranges and height of the range fan.



Description: Fire Support, Area, Weapon/Target Acquisition System Range Fans, Sector

#### Parameters:

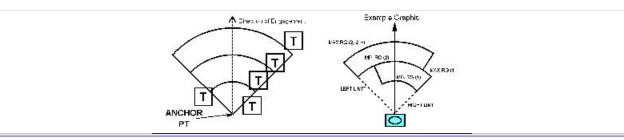
- Anchor Points. This graphic requires one anchor point that defines an object at a dynamic grid location. This coordinate, which pinpoints the current physical location of a specific unit, weapon or acquisition system, may change with the movement of the object. The symbol for that object is located at the anchor point.
- Size/Shape. Determined from the anchor point with a single azimuth that denotes Sector Center. The maximum left and right limits of the sector are measured from the sector centerline. Multiple ranges and/or maximum left and right limits of the sector, as well as height, may be entered, as required, to define the sector.
- 3. Orientation. The center point is typically centered over the known location of a weapon or target acquisition system. The orientation may change as the object moves or changes.

Fixed/Dynamic: Dynamic, to support requirements that the fan box be transferable between true and relative locations.

Hierarchy: 2.X.4.3.11.2 Symbol ID: G\*FPAXS

Label: Text boxes will be used to lable the minimum and maximum ranges and maximum left and

right sector limits and height.



#### **JIEO ANALYSIS**

#### OVERVIEW:

The proposed CP fulfills a need expressed by the Army for a standard Range Fan Symbol.

The following changes must be made to the standard to incorporate the proposed changes:

- 1.Revise table B-III, C2 Symbology: Military Operations symbol ID codes, to include the necessary information for the System Range Fan symbol.
- 2. Revise figure B-17, Fire Support, to include the System Range Fan symbols.
- 3.Revise table B-IV, C2 Symbology: Military Operations set, to include a generic and example symbol for both 2.X.4.3.11.1 and 2.X.4.3.11.2.

#### POTENTIAL CONFLICTS WITH EXISTING SYMBOLOGY:

The System Range Fan symbols do not conflict with any existing symbols within MIL-STD-2525B.

#### CONFORMANCE TO SYMBOL GUIDELINES:

The proposed System Range Fan symbols follows the rules concerning composition, construction, display, and transmission previously set forth in the standard.

#### ADEQUACY AND IMPACT ON OTHER PROGRAMS:

None known.

#### C/S/A COMMENTS

The Navy did not concur with the SSMC majority vote to approve this Change Proposal.

#### **ACTION TAKEN**

By a majority electronic vote, the SSMC approved this CP for addition to MIL-STD-2525B on 25 MAR 1999. It will be added to the MIL-STD-2525B either through a future change document or revision to the entire standard.

E-mail martina @ncr.disa.mil

February 3 meeting	Meeting Support Package	Meeting Minutes
1998 CP LIST	Symbology Home Page	CFS Home Page

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SYMBOLOGY CONFIGURATION MANAGEMENT CHANGE PROPOSAL FORM			
CHANGE PROPOSAL NUMBER MIL98-05			
ORIGINATOR	SPONSOR	DATE RECEIVED	DATE OF ACTION
Turner, David A. Capt. ACC/DRU (Mr. Steve Dowd)	USAF	1 DEC 1998	-
CHANGE PROPOSAL TITLE			

#### CHANGE PROPOSAL TITLE

MULTIPLE UAV PLATFORM SYMBOLS

#### SUGGESTED CHANGE

The symbols that represent UAVs, drones, and RPVs should differentiate between platforms. Change the description of 1.X.2.1.1.16 to UAV.

Knowledge of the specific mission/function of a UAV is critical for C2 decision-makers in apportioning the correct resource on the right target equals bombs on targets.

Existing Symbol for Drone (RPV/UAV), Number 1.X.2.1.1.16. Maintain as generic dass symbol.

Recommended symbol for UAV (Attack), Number 1.X.2.1.1.16.1



Recommended symbol for UAV (ISR), Number 1.X.2.1.1.16.2.



Recommended symbol for UAV (Comm), Number 1.X.2.1.1.16.3



Recommended symbol for UAV (Drone), Number 1.X.2.1.1.16.4



#### **JIEO ANALYSIS**

#### OVERVIEW:

CP MIL 98-05 proposed the addition of several new designations for the Drone (RPV/UAV) symbol. The addition of these symbol designations highlights the need for an examination of all possible missions/functions that may be performed by RPV/UAVs. Examining the four proposed designations, "A" (for Attack) is a proper addition and corresponds to existing symbology configurations. The second addition, "R" (Reconnaissance), is also a proper addition, though it does have other more specific options available to it. The designator "C" (intended to denote Communications) should be changed to "Y" (Communications (C3I)), in order to correspond to the designator used by other symbols within the Air Set. The final designator, "D", which is used in other symbols to describe a different mission/function (Airborne Command Post) should be dropped. As termed in the suggested change, a "drone" is the same as the existing generic symbol and the description given for it in table D-I for 1.X.2.1.1.16. Additionally, the term "platform" seems to describe the mission or function of the Drone, not the actual vehicle itself. The second sentence of the Suggested Change indicates a desire to change the symbol definition from "Drone" to "UAV". Recommend maintaining the definition as-is to avoid confusion, since the meanings of Drone, UAV, and RPV are nearly identical. Recommend that the below listed hierarchy,

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descriptions, and symbol ID codes be considered for inclusion in this change.

HIERARCHY	DESCRIPTION	SYMBOL ID
1.X.2.1.1.16.1	ATTACK	Α
1.X.2.1.1.16.2	BOMBER	В
1.X.2.1.1.16.3	CARGO	С
1.X.2.1.1.16.4	AIRBORNE COMMAND POST	D
1.X.2.1.1.16.5	FIGHTER	F
1.X.2.1.1.16.6	SEARCH & RESCUE (CSAR)	Н
1.X.2.1.1.16.7	ELECTRONIC COUNTERMEASURES (JAMMER)	J
1.X.2.1.1.16.8	TANKER	K
1.X.2.1.1.16.9	VSTOL	L
1.X.2.1.1.16.10	SPECIAL OPERATIONS FORCES (SOF)	M
1.X.2.1.1.16.11	MINE COUNTERMEASURES	MCM
1.X.2.1.1.16.12	ANTI-SURFACE WARFARE (ASUW)	N
1.X.2.1.1.16.13	PATROL	Р
1.X.2.1.1.16.14	RECONNAISSANCE	R
1.X.2.1.1.16.14.1	AIRBORNE EARLY WARNING (AEW)	W
1.X.2.1.1.16.14.2	ELECTRONIC SURVEILLANCE MEASURES	Z
1.X.2.1.1.16.14.3	PHOTOGRAPHIC	X
1.X.2.1.1.16.15	ANTI-SUBMARINE WARFARE (ASW)	S
1.X.2.1.1.16.16	TRAINER	T
1.X.2.1.1.16.17	UTILITY	U
1.X.2.1.1.16.18	COMMUNICATIONS (C3I)	Υ
1.X.2.1.1.16.19	MEDEVAC	+

The following changes must be made to the standard to incorporate the proposed changes:

- 1. Revise Appendix A, <u>Table A-V, C2 Symbology: UEI symbol ID codes air</u> to include the necessary information for the additional Drone (RPV/UAV) symbols.
- 2. Revise Appendix A, <u>Figure A-4</u>, <u>Air Track (Military fixed wing)</u> to include the necessary information for all Drone (RPV/UAV) missions/functions.
- 3. Revise Appendix A, Table A-XII, C2 Symbology: UEI set air to include four versions for all additional Drone (RPV/UAV) missions/functions to depict the unknown, friend, neutral, and enemy affiliations.









#### POTENTIAL CONFLICTS WITH EXISTING SYMBOLOGY:

Following the above listed methodology avoids any conflicts with existing symbology.

CONFORMANCE TO SYMBOL GUIDELINES:

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The addition of symbol designators to the existing RPV/UAV symbol conforms completely with the rules set forth regarding the composition, construction, and display of tactical symbols. The new symbol ID codes and hierarchy numbers also conform to the rules concerning their generation.

ADEQUACY AND IMPACT ON OTHER PROGRAMS:

None Known.

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E-mail martina@ncr.disa.mil

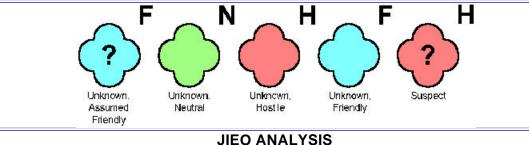
February 3 meeting	Meeting Support Package	Meeting Minutes
1998 CP LIST	Symbology Home Page	CFS Home Page

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SYMBOLOGY CONFIGURATION MANAGEMENT CHANGE PROPOSAL FORM					
CHANGE PROPO	SAL NUMBER	MIL99-	01A		
ORIGINATOR SPONSOR DATE RECEIVED DATE OF ACTION					
NCTSI	NAVY	March 12, 1999	-		
	CHANGE PROPOSAL TITLE				
ADD UNKNOWN ENVIRONMENT					
SUGGESTED CHANGE					
TI ELINIT '	141 0 41 1.51				

The ELINT community and the Operational Fleet users have a requirement to add new symbols to Table 1 of MIL-STD-2525B that enhance identification of tracks with an Unknown battle dimension. These tracks will contain ELINT data which provides an affiliation (Threat ID) based on the Electronic Order of Battle.

- 1. ELINT collectors may be unable to discern battle dimension from the emitter and may need the unknown environment category. The following examples pertain:
- -- The Front Door Fire Control Radar is found both on Echo Class Submarines and Kiev Class Cruisers.
- -- The Fan Song SA-2 Radar is found both on Kirov Class Destroyers and on Land Launchers
- -- The Don 2 and Don K are found on various surface and subsurface platforms
- -- The SPS-64 is found on various surface and subsurface platforms
- -- The LN-66 is found on multiple surface and subsurface platforms
- 2. ELINT/COMMINT collectors may be unable to discern battle dimension from the content of the message/signal intercepted. However, the Naval Order of Battle provides affiliation based on ELINT parameters. The affiliation (or threat) should not be denied to the operator if available via message traffic or signal exploitation.



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#### OVERVIEW:

This Change Proposal creates additional symbol types for those tracks having a known affiliation but an unknown battle dimension (KNOWN/UNKNOWN), with their affiliation most likely identified through electronic tracking of the object's signals. These new symbols are variants to the already existing UNKNOWN/UNKNOWN quatrefoil, and include symbol modifiers in field E for neutral (N), hostile (H), and friendly (F) tracks. If the symbol's affiliation is uncertain, a question mark is centered in the quatrefoil, resulting in a suspect (assumed hostile) symbol when it has an "H" in field E, and an assumed friendly symbol when it contains an "F". The fill for the frame is the same color as for other friendly (Cyan), neutral (Green), and enemy (Red) symbols.

The following changes must be made to the standard to incorporate the proposed changes:

- 1. Revise Table I, Frame shapes depicting affiliations and battle dimensions, to include each new symbol variant shown above.
- 2. Revise Table A-X, Warrior icon set unknown, to include symbols for each variant and their unique symbol identification codes. Symbol IDs would be: FRIEND/UNKNOWN = SFZP-----; NEUTRAL/UNKNOWN = SNZP------; HOSTILE/UNKNOWN = SHZP------; ASSUMED FRIEND/UNKNOWN = SAZP-----; and SUSPECT/UNKNOWN = SSZP-------
- 3. Add text description to paragraph 5.3.1.1 after "...and a diamond frame to denote hostile affiliation." It will read: "The letter 'F' in field E of an "unknown" frame identifies the symbol as friendly, an 'N' as neutral, and an 'H' as hostile. When combined with a question mark centered in the unknown frame, an 'F' indicates assumed friend, and an 'H' indicates a suspect track."

#### POTENTIAL CONFLICTS WITH EXISTING SYMBOLOGY:

These known affiliation/unknown battle dimension symbols do not conflict with any existing symbols within MIL-STD-2525B.

#### **CONFORMANCE TO SYMBOL GUIDELINES:**

The proposed symbols are a modification fo the rules concerning the composition, construction, and display previously set forth in the standard. Prior to this, the quatrefoil was only used to depict tracks with an unknown affiliation.

#### ADEQUACY AND IMPACT ON OTHER PROGRAMS:

None known.

#### C/S/A COMMENTS

#### NAVY COMMENTS:

The proposed symbols are consistent with rules concerning composition, construction, and display set forth in the standard.

#### **ACTION TAKEN**

E-mail martina @ncr.disa.mil

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SYMBOLOGY CONFIGURATION MANAGEMENT CHANGE PROPOSAL FORM					
CHANGE PROPOS	SAL NUMBER	MIL99	-02		
ORIGINATOR	DATE RECEIVED	DATE OF ACTION			
NCTSI	NAVY	March 12,1999	-		
	CHANGE PROPOSAL TITLE				
HIERARCHY NUMBERS 1.X.2.2.1.1 AND 1.X.2.2.1.4					
SUGGESTED CHANGE					

In MIL-STD-2525B, Figure A-6 Air Track (Missle In Flight), page 77:

- 1. Change title for hierarchy number 1.X.2.2.1.1 from "SURFACE/LAND LAUNCHED MISSLE" to "SURFACE LAUNCHED MISSLE". Deleting "LAND" from the title will remove ambiguity between sea and land launched missles.
- 2. Change title for hierarchy number 1.X.2.2.1.4 from "LAND ATTACK MISSLE" to "CRUISE MISSLE". This change is for clarification that will provide a greater level of granularity.

Proposed changes to hierarchy titles will be more consisent with MIL-STD-2525B. The proposed changes will also affect Tables A-V (page 54) and A-XII (pages 108-109).

#### **JIEO ANALYSIS**

#### OVERVIEW:

The intent of this Change Proposal is to align two symbol names within the Air Track (Missle in Flight) with the actual environment they operate in and operational use they follow.

#### POTENTIAL CONFLICTS WITH EXISTING SYMBOLOGY:

The changes to the symbol names do not cause any conflicts with other symbols within MIL-STD-2525B.

#### CONFORMANCE TO SYMBOL GUIDELINES:

The proposed changes do not affect the composition of the symbols regarding their composition, construction, display or transmission as they are set forth in the standard.

#### ADEQUACY AND IMPACT ON OTHER PROGRAMS:

None known.

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	C/S/A COMMENTS	
	ACTION TAKEN	
	E-mail martina@ncr.disa.mil	

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CM Plan Discussion Presentation

(To Added To Final Document)

# Symbology Standards Management Committee (SSMC) Members

\* Primary Representative \*\* Alternate Representative.

C/S/A Organization	Name/Title	Address	Telephone/E-mail
DISA	Ms. Anneliese Martin Chairperson SSMC	Parkridge III, Rm. 3202, 10701 Parkridge Blvd., Reston, VA 20191-4357	CMCL: (703) 735-3532 DSN: 653-3532 FAX: (703) 735-3256 E-MAIL: martina@ncr.disa.mil
Assistant Secretary of Defense for C4I	Mr. Paul Szabados * Chief Air Warfare	ASD/C3I/CISA ATTN: Mr. Paul D. Szabados, Chief Air Warfare Crystal Mall 3, 7th Floor 1931 Jefferson Davis Highway Arlington, VA 22202	CMCL: (703) 607-0259 FAX: E-Mail:paul.szabados@osd.mil
CJCS, Joint Staff, (J6I)	Ned Roper * LTC, USA (SD1 Contact)	Joint Staff, J-6l The Pentagon, Room 1E833, Washington, DC 20318-6000	CMCL: (703) 614-3864 DSN: 224-3864 FAX: (703) 697-6610 E-MAIL: ropernb@js.pentagon.mil
	Mr. Bob Chamberlain* Global C4I Test Division Manager	Mr. Bob Chamberlain Global C4l Test Division Manager Code N51 53690 Tomahawk Rd A125 San Diego, CA 92147	CMCL: (619) 553-8898 DSN: 553-8898 FAX: (619) 553-7526 E-MAIL: chamberl@nctsi.spawar.navy.mil
Chief of Naval Operations (CNO)	Ms. Mona Horten Contractor		CMCL: (619) 553-0075 DSN: 553-0075 FAX: (619) 553-7308 E-MAIL: mhorten@nctsi.spawar.navy.mil
	John Rubel ** CDR, USN	Chief of Naval Operations (N62J1)	CMCL: (703) 601-1410 DSN: 329-1410 E-MAIL: <u>rubel.john@hq.navy.mil</u>
	Mr. Simon Cole Contractor	2000 Navy Pentagon Washington, DC 20350-2000	CMCL: (703) 601-1410 DSN: 329-1410 E-MAIL: <u>cole.simon@hq.navy.mil</u>

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Chief of Staff, U.S. Air Force	Mr. Rex D. McKinnon * (SD-1 Contact)  Mr. Rick Jolly **  Mr. Gregg Noud **	HQ AFC4A/TNBC, 203 W. Losey St., Room 2000 Scott AFB, IL 62225-5421	CMCL: (618) 256-2975 DSN: 576-2975 FAX: (618) 256-2975 E-MAIL: rex.mckinnon@scott.af.mil  CMCL: (618) 256-2975 DSN: 576-2975 FAX: (618) 256-2975 E-MAIL: richard.jolly@scott.af.mil  CMCL: (618) 256-2975 DSN: 576-2975 DSN: 576-2975 FAX: (618) 256-2975 E-MAIL: gregg.noud@scott.af.mil  CMCL: (618) 256-2975 DSN: 576-2975 CMCL: (618) 256-2975
Chief of Staff, U.S. Army	Mark Haines * LTC, USA (SD1 Contact)	400 Army Pentagon, ODCSOPS, ATTN: DAMO-SSP Doctrine Branch Strategy Plans and Policy Divsion Washington, DC 20310-0400	FAX: (618) 256-2975 E-MAIL: anthony.pettiford@scott.af.mil  CMCL: (703) 693-6315 DSN: 223-6315 FAX: E-MAIL: haineml@hqda.army.mil
Commandant of the Marine Corps	Paul Skopowski * Maj, USMC (SD1 Contact)	HQ USMC C4I Code CP Federal Office Bldg. 2 Washington, DC 20380-1775	CMCL: (703) 607-5564 DSN: FAX: (703) 693-3101 E-MAIL: <u>skopowskip@hqi.usmc.mil</u>
Department of	Mr. Martin Fish *	HQ U.S. Coast Guard 2100 2nd St., SW Room 6420/G-SIA Washington, DC 20593-0001	CMCL: (202) 267-1307 FAX: (202) 267-4383 E-MAIL: mfish@comdt.uscg.mil
Transportation, U.S. Coast Guard	Mr. Brad Eyre ** SD-1 Contact	HQ U.S. Coast Guard 2100 2nd Street Room 6420/G-SIA Washington, D.C. 20593-0001	CMCL: (202) 267-1370 E-MAIL: beyre@comdt.uscg.mil
Director, Defense Intelligence Agency (DIA)	Mr. Pat Bond *	Defense Intelligence Agency, Code PO5C (Production Center, Interoperability Branch), Washington, DC 20340	CMCL: (202) 231-3981
	Mr. Daniel Gleason * (SD-1 Contact)	National Imagery and Mapping Agency, ATTN: Daniel Gleason Mail Stop P-24 12310 Sunrise Valley Drive Reston, VA 20191-3449	CMCL: (703) 262-4409 FAX: (703) 262-4401 E-mail: gleasond@nima.mil
National Imagery and Mapping Agency (NIMA)	Mr. Gordon Ferrari **	National Imagery and Mapping Agency, ATTN: G. Ferrari Mail Stop P-24 12310 Sunrise Valley Drive Reston, VA 20191-3449	CMCL: (703) 262-4417 E-MAIL: <u>ferrarig@nima.mil</u>
	Mr. S. Danny Rajan **	National Imagery and Mapping Agency, ATTN: S. D. Rajan Mail Stop P-24 12310 Sunrise Valley Drive Reston, VA 20191-3449	CMCL: (703) 262-4416 E-MAIL: <u>rajans@nima.mil</u>

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U.S. Atlantic Command (USACOM)	Doug Holroyd Lt Col, USAF	USACOM/J6 Code J612B ATTN: Lt Col Holroyd 1562 Mitsher Ave., Suite 200 Norfolk, VA 23551-2488	CMCL: (804) 322-5540 DSN: 836-5540 FAX:322-5736 E-MAIL: <u>holroydd@nosc.mil</u>
U.S. Central Command (CENTCOM)	Larry McNeal Maj (SD-1 Contact)	USCENTCOM/CCJ6 ATTN: COL Synyehaa, Bldg. 540 7115 S. Boundary Blvd. MacDill AFB, FL 33621-5101	CMCL: (813) 828-5412 DSN: 968-5412 FAX: E-MAIL: <u>Ilmcneal@centcom.mil</u>
U.S. European Command (EUCOM)	Ms. Diane Gorzoch (SD-1 Contact)	USEUCOM/ECJ6 Unit 30400 Box 1000 ATTN: Ms. Gorzoch APO AE 09128-4209	CMCL: No Local Telephone DSN: 314-430-5802 FAX:314-430-5007 E-MAIL: gorzoch@hq.eucom.mil
U.S. Pacific Command (PACOM)	Frank Rossi (Acting) Maj (SD-1 Contact)	USPACOM/J61 ATTN: Maj Rossi Systems Integration Division Camp H.M/ Smith, HI. 96861	CMCL: (808) 477-1043 DSN: 477-1043 DSN FAX: 477-1079 FAX: (808) 477-1079 E-MAIL: rossifj0@hq.pacom.mil
U.S. Special Operations Command (SOCOM)	Mr. Bower (SD-1 Contact)	USSOCOM/SOJ6-O ATTN: Mr. Bower 7701 Tampa Point Blvd. MacDill AFB, FL 33621-5323	CMCL: (813)828-4013 DSN: 828-4011 FAX: (813)828-4821 E-MAIL: <u>mailto:</u>
U.S. Southern Command (SOUTHCOM)	Mr. Ray Bennett (SD-1 Contact)	USSOUTHCOM, ATTN: SCJ6-P(Mr. Bennett) Unit 1160 APO AA 34003	CMCL: 011-507-282-3210 DSN: (313) 282-3210 FAX: (313) 282-3002 E-MAIL: bennettr@pentagon-hqdadss.army.mil
U.S. Space Command	Steve Clarke * LtCol, USAF (SD-1 Contact)	HQ USSPACECOM/J5X ATTN: LtCol Clarke 250 S. Petersen Blvd., Suite 116 Petersen AFB, CO 80914-3050	CMCL: (719)554-5843 DSN: 692-5843 FAX: 692-5493 E-MAIL: clarkes@usspacecom.cas.af.mil
(SPACECOM)	Russel Robert ** Lt, USAF	SMC/CWIX 155 Discover Blvd., Suite 1062 Los Angeles AFB, CA 90245-1062	CMCL: (310)363-5411 DSN: 833-5411 FAX: 833-1411
U.S. Strategic Command (STRATCOM)	Mr. Ramsey Lawrence (SD-1 Contact)	USSTRATCOM/J-61 Plans and Architecture ATTN: Mr. Ramsey 8456 South 42nd Street, Omaha, NE 68147	COM: (402) 294-5607 DSN: 271-5607 FAX: (402) 294-7078 E-MAIL: ramseyl@j61.stratcom.af.mil
U.S. Transportation Command -JTCC-SP (TRANSCOM)	Craig Koontz Col, USAF (SD-1 Contact)	USTRANSCOM/TCJ6 ATTN: Col Koontz Bldg. 1961, 508 Scott Dr. Scott AFB, IL 62225-5357	CMCL: (618) 256-3653 DSN: 576-3653 FAX: (618)256-4477 E-MAIL: koontzcl@transcom.safb.af.mil

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# Symbology Standards Management Committee (SSMC) Associate Members

\* Primary Representative.

\*\* Alternate representative.

C/S/A Organization	Name/Title	Address	Telephone/E-mail
Aerospace Command and Control Agency AC2A	Mr. Steve Dowd	Horizons Technology, Inc AC2A/C2FM 130 Andrews St., STE 216 Langley AFB, VA 23665-2777	CMCL: (757) 825-2695 DSN: 574-9655 FAX: (757) 825-3948 E-MAIL: <u>steve.dowd@langley.af.mil</u>
Air Force Space Command	Capt McAllister USAF	HQ AFSPC/SCXTA ATTN: Capt McAllister 150 Vandenburg Street Suite 1105 Petersen AFB, CO 80914-4330	
DMSO	Mr. Paul Foley	Defense Modeling and Simulation Office (DMSO) ATTN: Mr. Foley 1901 N. Beuaregard Street, Suite 504 Alexandria, VA 22311	CMCL: (703)998-0660 E-MAIL: pfoley@msis.dmso.mil
Joint Warfighting Center (JWC)	Dave Bentz Commander, USN	Joint Warfighting Center, Doctrine Division, Fenwick Rd.,Bldg 96, Ft Monroe, VA 23651-5000	CMCL: (757) 726-6449 E-mail: bentzd@jwfc.js.mil
Marine Corps Combat	Ms. Ann Keays (SD-1 Contact)	Doctrine Division (C42) 3300 Russell Rd., Suite 318A MCCDC Quantico, VA 22134-5021	CMCL: (703) 784-6227 DSN: 278-6227 FAX: (703) 784-2917 E-MAIL: keaysa@quantico.usmc.mil
Development Command (MCCDC)	Maj Buddy Peyton	Doctrine Division (C42) 3300 Russell Rd., Suite 318A MCCDC Quantico, VA 22134-5021	CMCL: (703) 784-6231 DSN: 278-6231 FAX: (703) 784-2917 E-MAIL: peytonbl@quantico.usmc.mil
Naval Air Warfare Center (NAWC) Service Lab	Ms. Jeanettarose Greene	Naval Air Warfare Center, Washington Navy Yard 901 M Street SE, Building 22 Washington DC 20374-5010	CMCL: (202) 441-1894 FAX: (202) 441-1794 E-MAIL:jgreene@ace.navy.mil
Naval Air Warfare Center Aircraft Division (NAWCAD)	Mr. Don Harris	Crew Systems Depatment Attn: Mr. Don Harris,Bldg2187, Ste2280 Naval Air Warfare Center Aircraft Division 48110 Shaw Road, Unit #5 Patuxent River, MD 20670-1154	CMCL: FAX: E-MAIL: harris don%PAX5@mr.nawcad.navy.mil
SPAWAR Systems Center San Diego	Dr. Kathleen Fernandes **	SPAWAR Systems Center, Code 4221, ATTN: Dr. Fernandes 53560 Hull Street San Diego, CA 92152	CMCL: (619) 553-9224 DSN:553-9224 FAX:(619) 553-4063 E-MAIL: fernande@spawar.navy.mil

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US Army Program Executive Office, Missile Defense	Mr. Theodore Hennings	PEOMD/SFAE-AMD-TSD-E ATTN: Mr. Ted Hennings P.O. Box 1500 Huntsville AL 35807-3801	CMCL: (205) 955-1062 DSN: 645-1062 Fax: (205) 955-4446 E-MAIL: <u>henningt@md.redstone.army.mil</u>
U.S. Army Command and General Staff College (CGSC)	Mr. Dave Turek	U.S. Army Command and General Staff College, Director, Corps & Division, ATTN: ATZL-SWW-P Ft Leavenworth, KS 66048	CMCL: (913) 684-4877 DSN: 552-4877 FAX: (913) 684-4257 E-MAIL: turekd@leav-emh1.army.mil
U.S. Army Combined Arms Doctrine Directorate	MAJ Donald L. Barnett **	CADD-CGSC Bell Hall Bldg 111 Ft Leavenworth, KS 66027	CMCL: (913) 684-4571 DSN: 552-4571 FAX: E-MAIL: <u>barnettd@leav-emh1.army.mil</u>
U.S. Army C2SID SPO	Mr. Patel Shamoli	U.S. Army C2SID SPO ATTN: Patel Shamoli Battlefield Visualization AMSEL-RD-C2-SP Ft. Monmouth NJ 07703	CMCL: DSN: FAX: E-MAIL:
U.S. ARMY Research Laboratory (ARL)	Mr. Jonas Zeman	USARL-HRED, CECOM Field Element Attn: AMSRL-HR-ML (J. Zeman) Ft. Monmouth, NJ 07703-5630	E-MAIL: zeman@doim6.monmouth.army.mil
U.S. Army Space Program Office (ASPO)	Mr. Michael Chadwell	U.S. Army Space Program Office, 2810 Old Lee Hwy., Suite 300 Fairfax, VA 22031	CMCL: (703) 275-5979 FAX: 275-5976 E-MAIL: <u>chadwellm@aspo.army.mil</u>

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# Symbology Standards Management Committee (SSMC) Observers

#### \* Primary Representative.

#### \*\* Alternate representative.

C/S/A Organization	Name/Title	Address	Telephone/E-mail
Army Systems Engineering Office	Mr. James Gallagher	Army Systems Engineering Office Ft. Monmouth, NJ 07703	CMCL: (908) 427-2331 DSN: 987-2331
	Mr. Tom Morgan	ASPO Support c/o U.S. Army Space Program Office, 2810 Old Lee Hwy., Suite 300, Fairfax, VA 22031	CMCL: (703) 633-8300 X4782 FAX: E-MAIL: morgant@aspo.army.mil
ASPO Support GSD	Mr. Daryl Madden	TRW 12900 Federal Systems Park Dr. Fairfax, VA 22053	CMCL: (703) 803-5689 FAX: 803-5328 E-MAIL: gsd.mail@trw.com
	Mr John Doyle	TRW 12900 Federal Systems Park Dr. Fairfax, VA 22033	CMCL: (703) 803-5689 FAX: (703) 803-5328 E-MAIL: john.doyle@trw.com
Compuuter Sciences Corporation	Mr. John Ramos	15 Christopher Way Eatontown, NJ 07724	CMCL: (732) 460-2162 FAX:(732) 578-9130 E-MAIL: <u>iramos7@csc.com</u>
DISA/JIEO/CFS	Mr. Mike Chase	Parkridge III, (D622) 10701 Parkridge Blvd., Rm 3205, Reston, VA 20191-4357	CMCL: (703) 735-3538 DSN: 653-3538 FAX:(703) 735-3256 E-MAIL: <u>chasem@ncr.disa.mil</u>
	Mr. Mike O'Connor	Parkridge III, D622, 10701 Parkridge Blvd. Reston, VA 20191-4357	CMCL: (703) 735-3064 DSN: 653-3064 E-MAIL: oconnorm@ncr.disa.mil
Flight Symbology Working Group FSWG	Mr. Eugene Kasper	Army/NASA Rotocraft Division NASA Ames Research Center M/S 210-5 Moffett Field, CA 94035-1000	CMCL: (650) 604-6881 FAX: E-MAIL: ekasper@mail.arc.nasa.gov
Field Artillery Tactical Data Systems FATDS	Mr. Henry Saphow	PM, FATDS SFAE-C3S-FS-TM Bldg 457 Ft. Monmouth, NJ 07703-5404	CMCL: (732) 427-3373 FAX: (732) 427-3322 E-MAIL: <u>hsaphow@c3smail.monmouth.army.mil</u>
JITC	Mr. Steve Kerr	JITC/JTACD, Bldg. 57305 Ft. Huachuca, AZ 85613	CMCL: (520) 538-5154 FAX: (520) 538-5257 E-MAIL: <u>kerrs@fhu.disa.mil</u>

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Logicon Communications Technology Group	Mr. John McConnell  Mr. Charles Large  Ms. Susan Walsh  Mr. Kort Woeller	Linpro Park 1, 1831 Wiehle Ave. Suite 300 Reston, VA 20190	CMCL: (703)318-1074 X362 FAX: (703)318-1098 E-MAIL: jmcconnell@logicon.com  CMCL: (703)318-1074 X344 FAX: (703)318-1098 E-MAIL: clarge@logicon.com  CMCL: (703)318-1074 X233 FAX: (703)318-1098 E-MAIL: swalsh@logicon.com  CMCL: (703)318-1074 X241 FAX: (703)318-1098 E-MAIL: kwoeller@logicon.com
Logicon Communications Technology Group, Corporate	Mr. Doug Fowler	2100 S. Washington Blvd. Arlington VA 22204-5710	CMCL: (703) 312-2000 FAX: (703) 979-0521 E-MAIL: <u>dfowler@logicon.com</u>
METOC (Defense Information Systems Agency)	Mr. Doug McDonald (SD-1 Contact)	DISA (D623) Attn: Mr. Doug McDonald 5600 Columbia Pike Falls Church, VA 22041	CMCL: (703) 681-2404 DSN: 761-2404 FAX: 761-2863 E-MAIL:
METOC (HQ US Marine Corps)	William Resavy LtCol USMC (SD-1 Contact)	HQ USMC ATTN: LtCol Resavy The Pentagon Room 5C721 Washington, DC 20310	CMCL: (703) 614-1835 DSN: 224-1835 FAX: (703) 227-7343
METOC (HQ USAF/XOWX)	Jim Mitchell MAJ USAF (SD-1 Contact)	HQ USAF/XOWX ATTN: MAJ Mitchell 1490 AF Pentagon Washington, DC 20330-1490	CMCL: (703) 696-4812 DSN: 226-4812 FAX: (703) 226-4947
METOC (US Navy)	Peter Furze CDR USN (SD-1 Contact)	U.S. Naval Observatory Bldg 1 ATTN: CDR Furze 3450 Massachusetts Ave. Washington, DC 20392-5421	CMCL: (202) 762-0260 DSN: 762-0260 FAX: (202) 762-2863
METOC (Joint Staff)	Lawerence Key Lt Col (SD-1 Contact)	Joint Staff J-38/ROD ATTN: LtCol Key Pentagon, Room 2B885 Washington, DC 20318-3000	CMCL: (703) 695-0583 DSN: 225-0581 FAX: (703) 224-6690
METOC (HQ Department of the Army)	Mr. Lee Page (SD-1 Contact)	HQ Department of the Army Office of the Deputy Chief of Staff for Intelligence (DAMI-POB) ATTN: Mr. Page Washington, DC 20310-1001	CMCL: (703) 614-2499 DSN: 225-5509 FAX: (703) 227-8849
Modern Technologies	Mr. Donald R. Smith	PM Soldier Suite 121 10401 Totten Rd Ft. Belvoir, VA 22060	CMCL: (703) 704-3858 FAX: (703) 703-3856 E-MAIL: smithdr@ix.netcom.com or dsmith@pmsoldier.belvoir.army.mil

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National Security Agency	Mr Dennis Greene (SD-1 Contact)	National Security Agency DOD/K4I-TSPL 9800 Savage Rd. Ft. Meade, MD 20755-6000	CMCL: (301) 688-0235 FAX: (301) 688-0201 E-MAIL:
Navy Warfare Development Command	Ms. Kelly J. Decker	Navy Warfare Development Command 1540 Gilbert Street N3P Norflok, VA 23511-2785	CMCL: (757) 455-0563 DSN 565-0563 FAX: (757) 455-0570 E-MAIL:
SPAWAR Systems Center San Diego	Mr. Roger Keating	SPAWAR RDT&E Div, Advanced Afloat System HSI-Code D44209 53245 Patterson Rd, San Diego CA 92152-7560	CMCL: (619) 553-2965 DSN: 553-2965 FAX: (619) 553-3650 E-MAIL: <u>keating@nosc.mil</u>
	Mr. William (Bill) Nugent		CMCL: (619) 553-2965 DSN: 553-2965 FAX: (619) 553-3650 E-MAIL: <u>wnugent@nosc.mil</u>
Sigmatech Inc.	Mr. Todd Wilkerson	Sigmatech Inc. ATTN: Mr. Todd Wilkerson, JTIDS Engineer AAMD NDF, AMCOM SED 6000 N. Technology Dr. Huntsville, AL 35805-1955	CMCL: (205) 876-6690 DSN: 746-6690 FAX: (205) 830-1394 E-MAIL: twilkerson@sed.redstone.army.mil
U.S. Army TACOM	Mr. Jeffery F. Jaster	US Army TACOM 11 Mile Road AMSTA-TR-R MS #264 Warren, MI 48397-5000	CMCL: (810) 574 - 5106 DSN: 786-5106 FAX: (810) 574 - 5933 E-Mail: jasterj@vtc.tacom.army.mil
U.S. Army, Commanche Program Office	Mr. Douglas H. Madigan	Mr. Douglas H. Madigan Commanche Program Office RSA-5681 SFAE-AVRAH-T Redstone Arsenal, AL 35898	CMCL: (205) 313-4523 FAX: (205) 313-4548 E-Mail: madigand@comanche.redstone.army.mil
U.S. Army, PM Intel Fusion Office	Mr. Ernie Zaloznik	U.S. Army, PM Intel Fusion Office ATTN: Mr Ernie Zaloznik 1616 Anderson Rd McLean, VA 22102-1616	CMCL: (703) 275-8032 FAX: (703) 275-8251
U.S. Navy	Rocky Wells CDR, USN	Dahlgren, VA	CMCL: (703) DSN: FAX:(703) E-MAIL: E-Mail: rwells@navy.mil

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